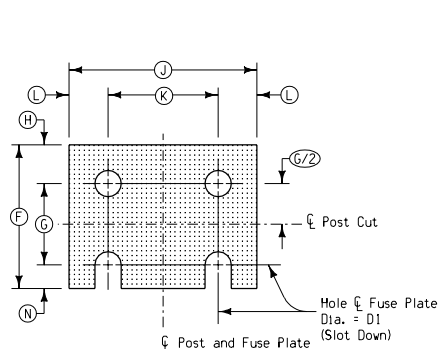


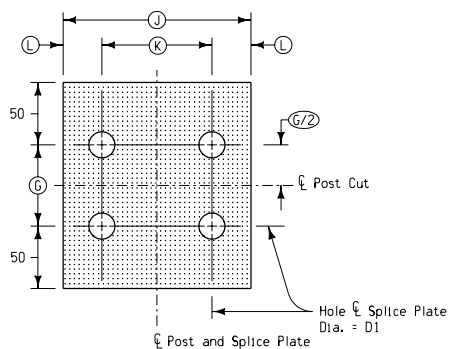
Alternate 1  
(With Splice Plate)

Alternate 2  
(One-Piece Post)

# DETAILS OF FUSE PLATE ASSEMBLY



FUSE PLATE  
(Thickness T3)



SPLICE PLATE  
(Thickness T4)

Bolt Size	Torque
12.7	136 N·m
15.9	244 N·m
19.0	434 N·m
22.2	637 N·m

FUSE AND SPLICE PLATE DATA												
Post Size	Bolt Dia.	F	G	H	J	K	L	N	D1	T3	T4	
W150x14	12.7	90	50	27	100	56	22	13	15	6	6	
W150x18	15.9	95	50	29	100	56	22	16	18	10	6	
W150x22	19.0	115	65	31	150	88	31	19	21	12	6	
W200x27	19.0	115	65	31	130	68	31	19	21	12	10	
W200x31	22.2	125	65	38	130	68	31	22	24	16	10	
W250x33	22.2	135	75	38	145	69	38	22	24	16	10	
W250x39	22.2	135	75	38	145	69	38	22	24	16	10	
W310x39	22.2	135	75	38	165	89	38	22	24	16	10	

## GENERAL NOTES:

Methods and materials for construction of "Breakaway Sign Posts" shall conform to current Standard and Supplemental Specifications for Signage. Current and Standard and Supplemental Specifications for Steel Structures shall also apply to appropriate work, such as welding, high tensile strength bolts, bolt holes, bolt tension, etc.

Holes in Fuse Plates and Splice Plates shall be drilled and the notches provided so that no metal projects beyond any face of the plate and the edges of the notches are smooth and true.

All parts and hardware for posts shall be galvanized after fabrication except as noted. All bearing surfaces of fuse plate assembly shall be smooth and free of beads or runs.

The price bid for "Breakaway Sign Post" shall be considered full compensation for fabrication and installation as indicated hereon.

Post cut shall be accomplished by either sawing or flame cutting, and may be made either before or after galvanizing of the post. If cut is made after galvanizing, the damaged area shall be repaired by painting or soldering. The resultant cut shall be subject to the approval of the Engineer.

## ALTERNATE NO. 2 ONLY:

If post is to be transported after cut is made, a "splice plate" shall be bolted to front of post to prevent damage to the post.

## BOLTING PROCEDURE-FUSE PLATE ASSEMBLY:

Fuse bolts shall be tightened by a method approved by the Engineer to obtain the torque specified for each bolt.

High strength bolts, nuts and washers shall be installed in an ungalvanized condition. After installation, all exposed surfaces of the bolts, nuts and washers shall be given two coats of zinc rich paint.

All dimensions given in millimeters unless noted.

<b>METRIC VERSION</b>	<b>Iowa Department of Transportation</b> Project Development Division	
	<b>STANDARD ROAD PLAN RD-21B</b>	
	REVISION: Add traffic arrows ; change General Notes.	REVISION NO. 4
	APPROVED BY: <i>[Signature]</i> 05-24-99 DESIGN METHODS ENGINEER	REVISION DATE 09-21-99
	DETAILS OF FUSE PLATE ASSEMBLY (FOR BREAKAWAY SIGN POST)	